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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,022	05/16/2001	Guy Barre	TS 5549 US	2253

7590

07/20/2005

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Houston, TX 77252-2463

EXAMINER

GRIFFIN, WALTER DEAN

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,022

Applicant(s)

BARRE ET AL.

Examiner

Walter D. Griffin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-10 and 14-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-10, and 14-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 5-10, and 14-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 113381 to Banta et al. in view of WO 98/01515 to Moureaux and US Patent 4,376,036 to Garwood et al.

The Banta reference discloses a process for the simultaneous dewaxing and desulfurization of heavy petroleum oils. The process comprises contacting the heavy oil, which

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has not been previously hydrotreated, and hydrogen with a catalyst at dewaxing and desulfurization conditions. The heavy oil may be a vacuum residual fraction or distillate boiling above 350°C and containing from 1 to 5% sulfur. The examples disclose the treatment of feeds that contain nitrogen amounts within the claimed range. The catalyst comprises a support such as silica, a ZSM-5 component (i.e., an MFI type zeolite), and a Group VIII metal component (e.g., nickel or palladium). A Group VI metal and alumina are not required in the catalyst. The ZSM-5 component has a silica to alumina ratio above 12 and a constraint index from 1 to 12. Process conditions include temperatures ranging from 315° to 455°C, pressures ranging from 3500 to 21000 kPa, and space velocities ranging from 0.1 to 5.0 LHSV. See the first paragraph on page 1; the first three complete paragraphs on page 2; pages 3-5; and the examples.

The Banta reference does not disclose that the feed is obtained by vacuum distillation of the residue of an atmospheric distillation of a crude petroleum feedstock, does not disclose that the zeolite is dealuminated, and does not disclose that the feed is a solvent extracted waxy raffinate obtained by solvent extraction of a vacuum distillate.

The Moureaux reference discloses a dewaxing catalyst that comprises a dealuminated ZSM-5 zeolite, Group VIII metal, and a silica binder. The dealumination of the zeolite can be achieved by methods disclosed in European patent specification 96921992.2 (EP 0832171 B1). These methods include treatment of zeolite and binder extrudates with an aqueous solution of a fluorosilicate salt. See page 9, lines 30-35; page 10, lines 1-3; page 11, lines 9-18 and 30-35; page 14, lines 4-31; page 15; lines 17-35; page 16, lines 1-5; page 21, lines 20 and 21; and page 22, lines 1-11.

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The Garwood reference discloses that feeds to dewaxing processes are typically produced by vacuum distilling an atmospheric tower residuum and then solvent extracting the resulting raw stock. See column 2, lines 8-17.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Banta by obtaining the feed by vacuum distilling the residue of an atmospheric distillation and then solvent extracting the resulting raw stock as suggested by Garwood because such a feed has the appropriate boiling range for the preparation of the desired products of Banta.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Banta by utilizing a catalyst containing a dealuminated zeolite produced in the manner disclosed by Moureaux because such a catalyst has dewaxing activity and this activity is essential in the process of Banta.

Response to Arguments

The argument that the Banta and Moureaux references are in such conflict that it is improper to combine them is not persuasive. The Moureaux reference discloses a process for dewaxing a hydrocarbon that has a high sulfur content (up to but not including 1000 ppmw) and utilizes a dealuminated zeolitic catalyst to achieve this result. Since Banta also desires to dewax a high-sulfur feed, the examiner asserts that one having ordinary skill in the art would expect a catalyst containing a dealuminated zeolite to be effective in the Banta process. The examiner reminds applicants that the Moureaux reference is utilized only for its teaching of a dealuminated zeolite.

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The argument concerning the differences in the amounts of zeolite in each catalyst disclosed by Banta and Moureaux is not persuasive because the catalyst of Banta may contain up to 80% zeolite and the catalyst of Moureaux may contain up to 90% zeolite.

The argument concerning the type of binder is not persuasive because the binder of Banta is not required to be alumina.

The argument that there is no suggestion to combine the Garwood reference with the Banta reference is not persuasive because each reference is drawn to a dewaxing process. The Garwood reference is utilized to show that feeds to dewaxing processes are typically produced by vacuum distilling an atmospheric tower residuum and then solvent extracting the resulting raw stock. The examiner maintains that one having ordinary skill in the art would recognize that feeds such as those produced in the manner disclosed by Garwood are appropriate for the process of Banta.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

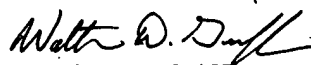
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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is (571) 272-1447. The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Walter D. Griffin
Primary Examiner
Art Unit 1764

WG
July 18, 2005